

# **2006 School Construction Annual Report**



**May 2007**

**Indiana Department of Local Government Finance**

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## 2006 School Construction Annual Report

The overall cost of building, remodeling and adding on to Indiana schools decreased in 2006, despite the volume of projects remaining nearly static. The Department of Local Government Finance approved 105 school construction projects in 2006, totaling more than \$755 million in construction costs. In 2005, the Department approved 108 school construction projects at a price tag of more than \$1.03 billion in construction costs. The majority of the savings, \$337 million, were realized from the 65% reduction in total construction cost for new construction. While the scope and type of projects differed from 2005 to 2006, the most notable change present was the application and availability of construction cost per square foot thresholds. Calculated from national school construction statistics, these thresholds provided schools a benchmark to use in 2006 that was unavailable prior to their creation in May 2005. The 2006 school construction data, coupled with the input from school officials and industry professionals, contributed greatly to reducing the cost of school construction in Indiana.

The number of requests to build new schools decreased from 21 in 2005 to 8 in 2006. (Figure 1) New elementary school construction costs remain above the cost per square foot thresholds; however, the overage decreased substantially from \$45.51 in 2005 to \$19.13 in 2006. (Figure 1) The cost to build new middle schools decreased in 2006, ending the year 50 cents per square foot less than the thresholds. (Figure 1) New high school construction costs continued to exceed the cost per square foot thresholds in 2006; however, the overage decreased significantly from \$50.79 to \$1.26. (Figure 1)

**Figure 1 – New Construction Cost Overview**

<b><u>New Construction Costs</u></b>						
	<i>Total Number Requested</i>			<i>Total Amount Requested</i>		
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Elementary	10	12	4	\$172,819,613	\$192,277,510	\$71,441,000
Middle	1	5	3	\$14,428,672	\$174,984,880	\$80,340,218
High	1	4	1	\$96,230,606	\$154,630,352	\$32,818,600
Totals	<b>12</b>	<b>21</b>	<b>8</b>	<b>\$283,478,891</b>	<b>\$521,892,742</b>	<b>\$184,599,818</b>

<b><u>2006 New Construction Cost Per Square Foot</u></b>				
	<b>Approved (Average)</b>	<b>Threshold</b>	<b>2005 Difference</b>	<b>2006 Difference</b>
Elementary	\$159.13	\$140	\$45.51	\$19.13
Middle	\$145.50	\$146	\$40.87	- \$0.50
High	\$158.26	\$157	\$50.79	\$1.26

*Sources: DLGF Hearing Information Sheets 2004-2006 Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.*

While the number of requests to add on to Indiana schools increased slightly from 28 in 2005 to 30 in 2006, the construction costs for these projects were all below the cost per square foot thresholds. (Figure 2) Elementary schools accounted for the largest number of addition projects and finished the year \$33.48

per square foot below the cost per square foot thresholds. (Figure 2) Middle school additions were \$62.14 per square foot less than the cost per square foot thresholds, and high school additions were \$30.12 per square foot less than the threshold. (Figure 2)

**Figure 2 – Additions Construction Cost Overview**

	<u>Total Number Requested</u>			<u>Additions</u> <u>Total Amount Requested</u>		
	2004	2005	2006	2004	2005	2006
Elementary	24	15	17	\$60,674,097	\$80,365,845	\$54,002,669
Middle	11	6	5	\$3,669,686	\$48,543,828	\$62,368,957
High	3	7	8	<u>\$100,360,228</u>	<u>\$42,858,877</u>	<u>\$141,535,781</u>
<b>Totals</b>	<b>38</b>	<b>28</b>	<b>30</b>	<b>\$164,704,011</b>	<b>\$171,768,550</b>	<b>\$257,907,407</b>

<u>2006 Additions Construction Cost Per Square Foot</u>				
	<u>Approved (Average)</u>	<u>Threshold</u>	<u>2005 Difference</u>	<u>2006 Difference</u>
Elementary	\$151.52	\$185	\$105.45	- \$33.48
Middle	\$153.86	\$216	- \$22.29	- \$62.14
High	\$192.88	\$223	- \$29.33	- \$30.12

*Sources: DLGF Hearing Information Sheets 2004-2006 Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.*

Remodeling projects saw the greatest gain in volume, increasing from 59 in 2005 to 67 in 2006.

Although no cost per square foot thresholds exist for remodels due to the great variance in scope, total remodeling costs decreased dramatically in 2006. (Figure 3) On average, the total construction cost of remodeling projects decreased \$146.3 million, a 44% reduction in remodeling costs in 2006.

**Figure 3 – Remodel Construction Cost Overview**

	<u>Total Number Requested</u>			<u>Remodels</u> <u>Total Amount Requested</u>		
	2004	2005	2006	2004	2005	2006
Elementary	43	21	39	\$83,733,593	\$46,048,557	\$61,481,203
Middle	7	22	14	\$1,978,741	\$180,324,910	\$49,306,642
High	19	16	14	<u>\$84,988,262</u>	<u>\$110,795,670</u>	<u>\$80,055,562</u>
<b>Totals</b>	<b>69</b>	<b>59</b>	<b>67</b>	<b>\$170,700,596</b>	<b>\$337,169,137</b>	<b>\$190,843,407</b>

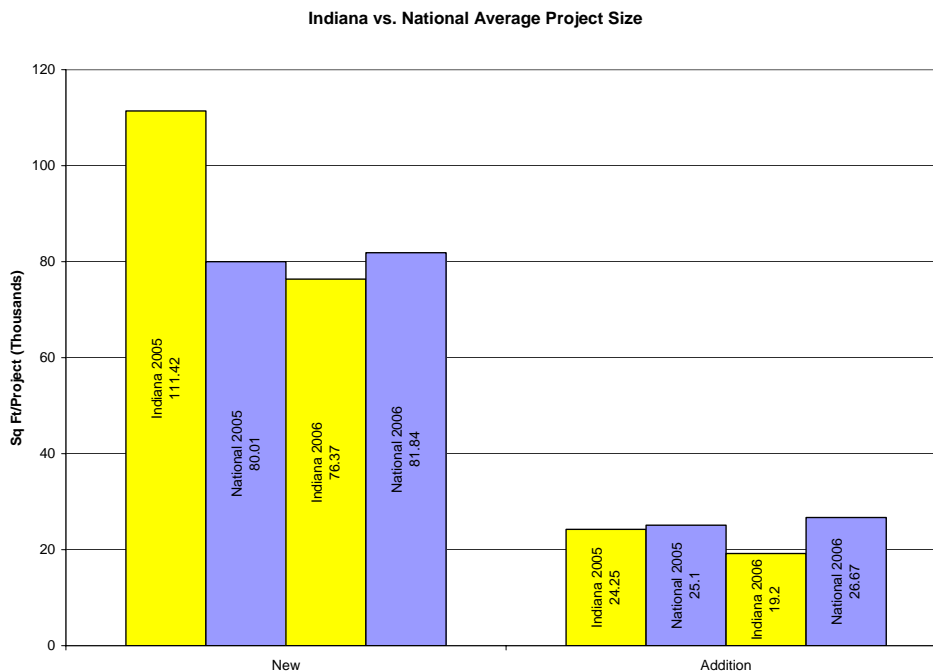
*Sources: DLGF Hearing Information Sheets 2004-2006 Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.*

## Project Reductions

The Department utilized its statutory authority to modify five projects during 2006, reducing construction costs by \$6.4 million and financing costs by nearly \$27 million. This represents a tangible savings for Hoosier taxpayers of \$33 million dollars.

## National Averages

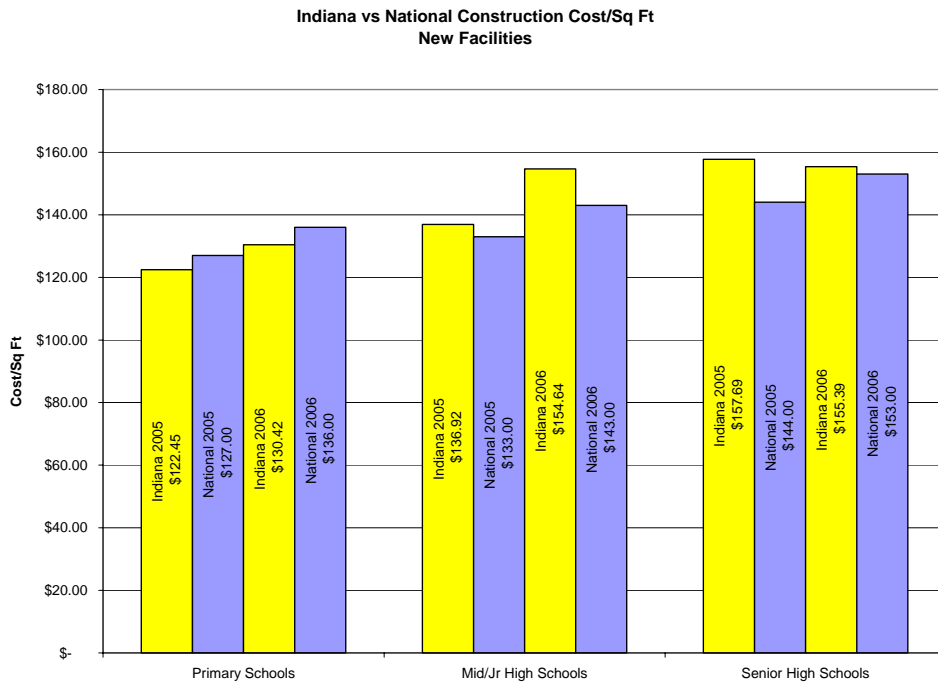
**Figure 4 – Indiana vs. National Average Project Size**



*Data Source: F.W. Dodge Analytics. Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.*

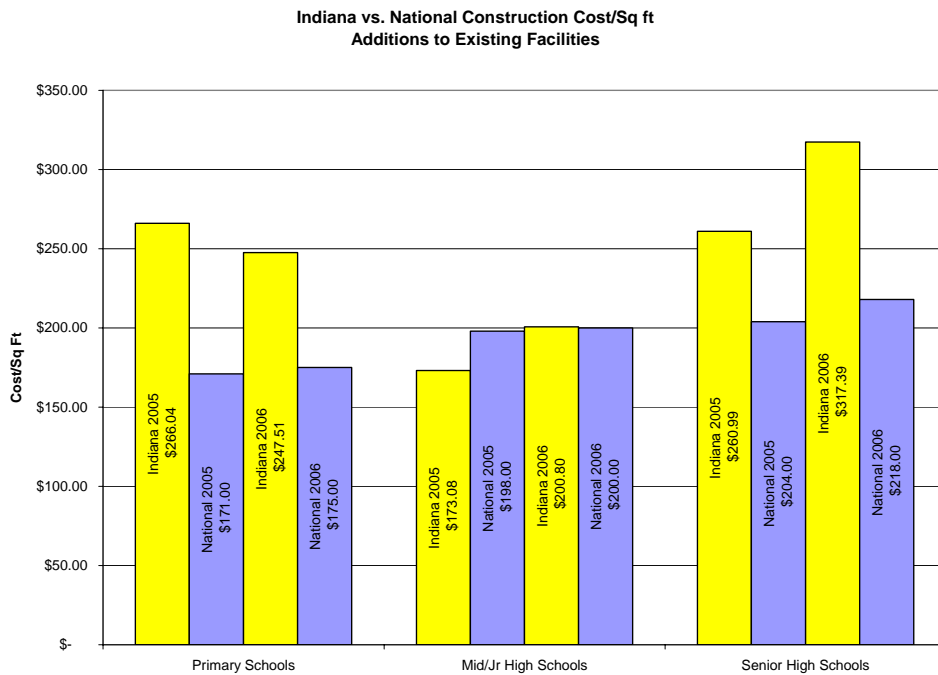
Between 2005 and 2006, Indiana school construction projects for new facilities and additions to existing facilities have decreased in size and were smaller than the national average in 2006. (Figure 4) Indiana made notable progress moving from an average of 111,420 square feet per project in 2005 for new construction to 76,370 square feet per project in 2006. For additions to existing facilities, Indiana dropped from 24,250 square feet per project in 2005 to 19,200 square feet per project in 2006. But, as illustrated in Figures 5 and 6, Indiana school construction projects are still generally costing more per square foot than the national average. (Figure 5) Elementary construction costs per square foot for new facilities increased from 2005 to 2006 in line with increases in the national average. (Figure 5) For new middle schools facilities, Indiana's construction costs per square foot increased from \$136.92 in 2005 to \$154.64 in 2006. (Figure 5) For new high school projects, Indiana's average construction cost per square foot decreased from \$157.69 in 2005 to \$155.39 in 2006 moving much closer to the national average, which saw an increase during the same years. (Figure 5)

**Figure 5 – Indiana vs. National Construction Cost/Sq. Ft. New Facilities**



Data Source: F.W. Dodge Analytics Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.

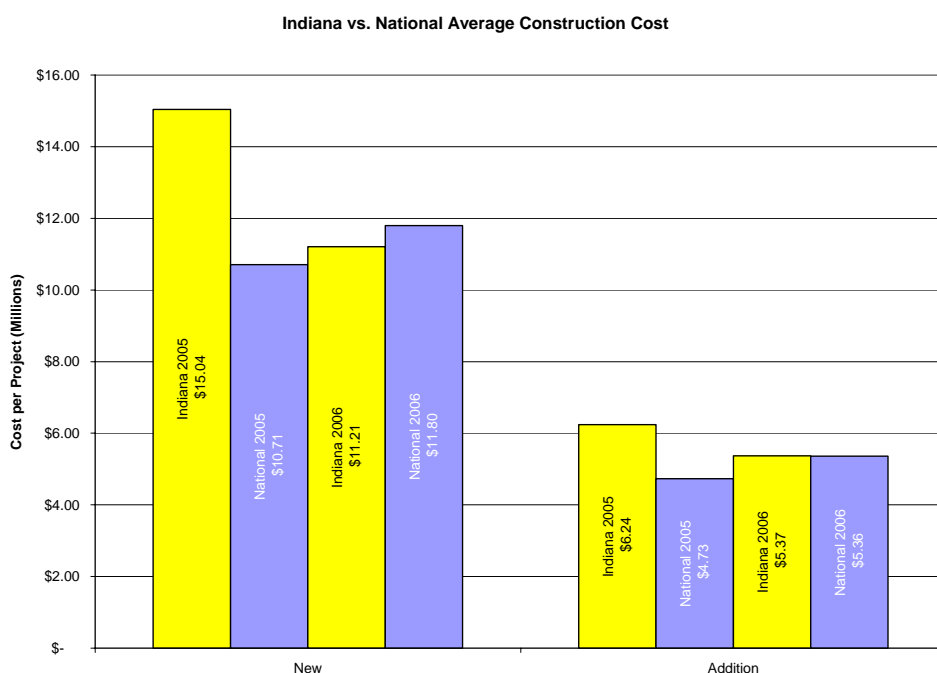
**Figure 6 – Indiana vs. National Construction Cost/Sq. ft. Additions to Existing Facilities**



Data Source: F.W. Dodge Analytics Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.

For additions to existing elementary facilities, the national average increased from 2005 to 2006 while Indiana's average construction cost per square foot decreased from \$266.04 in 2005 to \$247.51, moving closer to the national average. (Figure 6) For additions to existing middle schools, Indiana's average construction cost increased but remained in line with the national average. (Figure 6) Indiana high school additions saw a larger increase, moving from \$260.99 construction cost per square foot in 2005 to \$317.39 in 2006, compared to the national average of \$218.00 construction cost per square foot. (Figure 6) The increase in construction cost per square foot was offset by the reduction in average project size resulting in an overall reduction in total construction costs of all projects. (Compare Figures 5, 6 with Figure 7)

**Figure 7 – Indiana vs. National Average Construction Cost**



*Data Source: F.W. Dodge Analytics Excludes legal and financing costs of bond issuance and projects consisting of a combinations, additions and renovations.*

## Conclusions & Recommendations

Indiana has made great progress moving from well above the national average to being at or below the national average in average project size and total project construction cost. But, we must not let the significant progress slow down. The findings of this report support the continued need for review and analysis of school construction projects in the State of Indiana. The construction cost thresholds, implemented in May 2005, provided a meaningful benchmark for school officials and professionals to use in controlling the cost of school construction in Indiana. The Department has updated the construction

cost thresholds to serve as benchmarks for review of 2007 school construction project financings. (Figure 8)

**Figure 8 – 2007 School Construction Cost Thresholds**

<b>School Type</b>	<b>New Facilities</b>	<b>Additions to Facilities</b>
Elementary	\$150/ sq ft	\$193/ sq ft
Middle/Intermediate	\$157/ sq ft	\$220/ sq ft
High School	\$168/ sq ft	\$240/ sq ft

*Source: F.W. Dodge Analytics & DLGF Information*

The 2006 data contained in this report provides the first substantial evidence of the value of the thresholds, as the benefits in 2005 were disguised due to the approval of more than \$500 million in school construction project financings prior to the application of the thresholds. The overall decrease in new construction coupled with the increase in additions and remodels may indicate a trend in the way school officials are approaching facility modernization. This trend supports the idea that school officials are first considering adding on to or remodeling the facilities they currently have before constructing new buildings. Another challenge faced by school officials is the need to finance infrastructure, sewage and utility work necessary at new school sites, which directly impacts project cost. School, city, town and county officials should seek a way to “share” these costs as school construction projects often positively affect the economic climate in an area.

While school officials, industry leaders and the Department achieved great success in reducing the total average project cost of school construction in 2006, leaders should take caution when communicating the success. Much work lies ahead for all of us in identifying and implementing a long-term, sustainable solution to control school construction costs. If approved, three large project financings slated for review in 2007 may diminish the gains realized in 2006. Avon Schools has presented a \$129.5 million project for consideration; Indianapolis Public Schools have announced a possible \$475 million project, while Fort Wayne Schools have announced a \$500 million project. These projects alone exceed the entire price tag of projects reviewed in 2006.

The Department continues to seek best practices from industry and educational leaders across the nation to provide a long-term solution to the state’s school construction needs. A survey of how states fund educational capital programs reveals that, unlike Indiana, many states centrally fund some portion of school capital projects. Many states harness the power of cost-share programs that use a wealth index to allocate state capital project funds to the state’s neediest districts. These districts only become eligible to receive the state capital project funds if the proposed project meets state guidelines or thresholds. While these solutions provide cost control and provide incentives for meeting a given standard, they come with a



significant price tag. Building upon the idea of rewarding those who meet state standards, Indiana leaders may consider earlier state involvement and oversight of projects to set the conditions to control costs. The state's School Property Tax Control Board and Department of Local Government Finance currently review projects late in the design phase after local districts have invested significant time, effort and money into research and development. Adoption of an early involvement approach, coupled with the cost per square foot thresholds, could result in significant gains for Indiana schools and taxpayers when paired with property tax control mechanisms such as the local capital projects planning board or the tax adjustment board concepts as identified by Governor Daniels. Additional improvements and incentives for meeting state thresholds could come from an expedited state review process for projects that meet the state's cost per square foot thresholds. Decreasing the review time for projects meeting the thresholds would not only encourage schools to meet the standards, could have the potential to reduce soft costs and construction delays.

As officials continue to refine the school construction process, the focus must remain on providing a quality education for Indiana students. Schools must be able to provide a safe, clean, and comfortable environment conducive to learning. The refined review process must ensure that priority is met while at the same time ensuring schools are not palatial or centered on non-academic space.